

REMARKS

Claim 15 has been amended above to overcome the examiner's objection.

Claims 2 and 10 have been converted from dependent form into independent form. This change in form does not narrow or limit the scope of the claims. The independent claim which claims 2 and 10 were formerly dependent upon have not been cancelled. Therefore, the full scope of the doctrine of equivalents should apply to claims 2 and 10 as if they were originally presented in independent form when the application was filed. In view of "Allowable Subject Matter" section on page 4 of the office action, claims 2 and 10 should be in condition for allowance.

Claim 1 was rejected under 35 U.S.C. 102(b) as being anticipated by Wu (US 5,961,351). Claims 1 and 15-17 were rejected under 35 U.S.C. 102(b) as being anticipated by DE 3108744. Claims 1 and 15-17 were rejected under 35 U.S.C. 102(b) as being anticipated by Castaldo (US 5,934,931). The examiner is requested to reconsider these rejections.

Claim 1 has been amended above to clarify applicant's claimed invention. Claim 1 claims that the retaining means is provided on the jaws which engage each other to keep the jaws in the closed position, and that the clamp is formed from plastic material and is sized and shaped to be directly connected via the fastening means to the insulating casing of the electric connector.

Wu discloses a rear shield frame portion 50 made of metal. It has to be made of metal in order to function as a shield. Slots 54 are used to attach with hooks 72 on the front shield frame portion 70. Wu discloses that:

- the rear frame shield portion 50 has a base plate 51 simply abutting the rear end of the dielectric casing;
- the rear frame shield portion 50 is secured to the front frame shield portion 70 by engaging hooks 72 and slots 54, so that the dielectric casing 10 is enclosed by such rear and front frame shield portions (column 6, lines 22-47);
- a cap and strain relief sleeve are injected to cover the front and rear shield frame portions 50, 70, thus fixing the rear shield frame portion 50 to the dielectric casing 10.

Claim 1 differs from the electric connector disclosed in Wu for comprising a plastic clamp having fastening means for being directly connected to the insulating casing. The technical effect due to this difference is to avoid that the stresses affecting the cable penalize the accuracy of the electrical coupling between the claimed electrical connector and a mating second connector, without increasing the overall complexity of such electrical connector.

Thus, the objective technical problem is how to modify the electrical connector disclosed in Wu to achieve the aforesaid technical effect.

Claim 1 solves this problem thanks to the fact that the clamp is formed from plastic material and comprises fastening means for being connected directly to the casing. As the clamp grips the cable and comprises fastening means for being connected directly to the casing, the vibrations and/or the displacements affecting the cable in the actual use are transmitted from the cable to the casing through the clamp, without stressing the terminals. As the terminals are not stressed, the electrical connection between the claimed electric connector and the mating electric connector is not impaired.

Furthermore, as the casing and the clamp are formed from materials having the same thermal dilatation, the generation of small movements between such casing and clamp is prevented and vibrations are transmitted to the casing via the clamp even at high temperature. On the contrary, the electric connector disclosed in Wu requires the presence of an additional fastening structure distinct from the rear shield frame 50, namely the molded cap 80 and cable strain relief sleeve 82 (column 6, lines 47-52), to rigidly connect such rear shield frame 50 with the casing 10 so preventing the vibrations and/or displacements affecting the cable to penalize the electrical coupling between the claimed electrical connector and the mating electrical connector. Such molded cap and cable strain relief device evidently result in a more complex electrical connector with respect to the claimed one. Such result is completely contrary to the aim underlying the objective technical problem. In particular, without the presence of strain relief device, the

vibrations and/or displacements affecting the cable of Wu would be firstly transmitted to the rear frame shield, then to the front frame shield, and finally to the casing. Therefore, vibrations would be transmitted from cable to casing along a transmission chain made of two element and, therefore, having an additional element, i.e. the front shield frame 70, with respect to the transmission chain of the electric connector as claimed in claim 1. The presence of an additional element would increase the likelihood of displacements along the transmission chain. Furthermore, the rear and frontal frame shield, as being made in metal, exhibit a thermal differential dilatation with respect to the casing, which is made by an insulating material.

Without the presence of the molded strain relief device, such thermal differential dilation would inevitably result in the presence of displacements between the casing and the rear frame shield at high temperature. As a consequence of such displacements along the transmission chain, it would be necessary to ensure the terminals a supplemental freedom of movement, so that the strain due to vibrations and/or displacements is sustained by the casing and not by such terminals. This freedom would inevitably result in a loss of accuracy in the electrical connection between the claimed and the mating connectors.

There is no disclosure or suggestion of applicant's invention of claim 1 from Wu.

DE 3108744 shows a member 2 with jaws 9,10 and members 14 which are received in clots 15. Claim 1, however, claims that

the retaining means is provided on said jaws which engage each other to keep said jaws in said closed position. This is not disclosed or suggest in DE 3108744. In DE 3108744 the housing 1 keeps the jaws 9, 10 closed. There is no disclosure or suggestion of a retaining means provided on the jaws 9, 10 which engage each other to keep the jaws in the closed position.

Castaldo discloses split body portions 42, 44 which are held together by threaded fasteners 50 and living hinges 46 on central portion 20. Claim 1 claims that the clamp has fastening means for fitting the clamp to an insulating casing of an electric connector and that the clamp is sized and shaped to be directly connected via the fastening means to the insulating casing of the electric connector. The split body portions 42, 44 are integral with the central portion 20. There is no disclosure or suggestion of fastening means for fitting the clamp to an insulating casing of an electric connector, wherein the clamp is sized and shaped to be directly connected via the fastening means to the insulating casing of the electric connector. In Castaldo the jaws 42, 44 are already permanently connected by the living hinges 46, 48.

The features of claim 1 are not disclosed or suggested in the cited art. Therefore, claim 1 is patentable and should be allowed.

Though the claims dependent upon claim 1 contain their own allowable subject matter, these claims should at least be allowable due to their dependence from allowable claim 1.

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However, to expedite prosecution at this time, no further comment will be made.

Claims 19-23 have been added above to claim the features recited therein.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issue remain, the examiner is invited to call applicant's attorney at the telephone number indicated below.

Respectfully submitted,

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